

IN THE CLAIMS:

Claim 1 (Currently Amended): A cellular wireless communication network system,
comprising:

a plurality of base stations ~~and a plurality of mobile stations~~, wherein said base stations
are connected together with wireless communication[[,]]; and

a plurality of mobile stations, wherein communication between at least one of the
plurality of base stations and at least one of the plurality of mobile stations is achieved by a
packet CDMA communication method, such that a packet of the packet CDMA communication
method includes a frame composed of a preamble block having a barker code and an information
block having an orthogonal M series codes.

Claim 2 (Withdrawn): A wireless communication network system as claimed in Claim 1,
wherein said wireless communication with which said base stations are connected together, is
achieved by an OFDM communication method.

Claim 3 (Currently Amended): [[A]] The wireless communication network system as
claimed in Claim 1, wherein said wireless communication ~~with which~~ among the plurality of
[[said]] base stations ~~are connected together~~, is achieved by ~~an AS-CDMA~~ a Spread Spectrum
CDMA (SS-CDMA) communication method.

Claim 4 (Cancelled).

Claim 5 (Cancelled).

Claim 6 (Withdrawn): A wireless communication network system as claimed in any one of Claim 1 to Claim 5, wherein the communication between said base station and said mobile stations, is achieved by a multicode transmission method for both of a downlink and an uplink.

Claim 7 (Withdrawn): A wireless communication network system as claimed in Claim 6, wherein said multicode transmission method comprises:

assigning data to a plurality of different orthogonal spread code;

combining together the data assigned to the respective orthogonal code at the same time to compose one information block; and

adding said information block after the preamble block to compose the one frame when the information is transmitted.

Claim 8 (Withdrawn): A wireless communication network system as claimed in Claim 7, wherein said multicode transmission method comprises:

detecting said information block by a detection of said preamble,

reversely spreading said spread code after a synchronization of the respective spread code has established which are included in the information block; and

demodulating the data based on the respective spread code and synthesizing the respective data when the information is received to demodulate the whole information.

Claim 9 (Withdrawn): A wireless communication network system as claimed in any one of Claim 1 to Claim 5, wherein the communication between said base station and said mobile stations, is achieved by a M-array transmission method for both of a downlink and an uplink.

Claim 10 (Withdrawn): A wireless communication network system as claimed in Claim 9, wherein said M-array transmission method comprises:

dividing the data and assigning the orthogonal spread code to the every data respectively;
selecting the spread code in order of time base and combining together to compose one information block; and

adding said information block after the preamble block to compose the one frame of the data when the information is transmitted.

Claim 11 (Withdrawn): A wireless communication network system as claimed in Claim 10, wherein said M-array transmission method comprises:

detecting said information block by a detection of said preamble;
establishing synchronization of the respective orthogonal spread code which are included in said information block;

generating a number of reverse spread code, the number of which corresponds to the number of spread code used based on the synchronizing signal;

reversely spreading the respective spread code which are included in said information block; and

demodulating the data through integral networks by comparing the resulted integrated value made by the respective integral networks when the information is received.

Claim 12 (Currently Amended): [[A]] The wireless communication network system as claimed in Claim 1 [[4]], wherein [[the]] an uplink communication between ~~said base station and~~ said the at least one of the plurality of mobile stations and the at least one of the plurality of base stations, is achieved utilizing the ~~approximate-synchronized~~ Approximate Synchronized CDMA (AS-CDMA) method ~~at the uplink~~, and ~~wherein said~~ such that a packet is composed of the AS-CDMA method includes a [[one]] ~~flame which includes~~ having a synchronizing block and an information block ~~which are arranged in this order~~, [[and]] said information block includes ~~comprises the approximate-synchronized CDMA~~ AS-CDMA code.

Claim 13 (Currently Amended): [[A]] The wireless communication network system as claimed in Claim [[12]] 1, wherein ~~the~~ downlink communication between the at least one of the plurality of base stations and the at least one of the plurality of ~~said base station and said~~ mobile stations, is achieved by ~~that an~~ information about [[the]] a phase is included [[on]] in the preamble portion, such that ~~and said cell~~ information about the cellular wireless communication network system ~~the cell~~ is ~~provided~~ determined from [[by]] the information about the phase [[at]] ~~the downlink~~.

Claim 14 (Currently Amended): [[A]] The wireless communication network system as claimed in Claim 13, wherein ~~the communication between said base station and said mobile stations, is achieved by that~~ an absolute phase and reverse spreading are determined from is ~~detected by the~~ phase information about the phase included in the on said preamble block portion ~~as a reference phase, and said data are~~ such that detected absolute phase and reverse spreading ~~are subjected to~~ [[the]] a phase correction and [[the]] a frequency offset correction ~~after reverse spreading~~, then [[said]] resultant data [[are]] is demodulated by [[the]] an absolute synchronizing detection ~~at the downlink~~.

Claim 15 (Currently Amended): [[A]] The wireless communication network system as claimed in Claim 1, wherein said base station ~~takes~~ stations detect a [[the]] correlation of data transmitted the through downlink communication and uplink communication at the receiving portion and then detects the determine a receiving timing of the data, such that calculate a timing that said receiving timing becomes [[the]] most suitable is calculated, ~~inserts the~~ and a most suitable timing is inserted as [[the]] a timing controlling information [[into]] in the frame for the downlink communication and send the data.

Claim 16 (Currently Amended): [[A]] The wireless communication network system as claimed in Claim 15, wherein said mobile station establishes [[the]] synchronization of [[the]] spread code by detecting the spread code included in the preamble block ~~portion at the receiving~~ portion of the frame transmitted through the downlink communication, ~~after making~~ performs [[the]] reverse spreading of the spread code, demodulates [[the]] resultant data through [[the]] integral networks, [[then]] extracts [[the]] a transmission timing control information ~~which is~~ inserted in the [[received]] transmitted flame, controls [[the]] chip timing of the reverse spread code based on the transmission timing controlling information, and ~~transmit the~~ transmits demodulated data [[as]] through the uplink communication.